

In the Abstract

Purpose

A biomass gasification system and operating method thereof are able to prevent hindrances caused by the tar component in a fuel gas and to thermally utilize a fuel gas containing a tar component. Means A gas reforming tower[[4]], able to thermally crack the tar component in a fuel gas by increasing the temperature thereof to a process temperature, is connected to a gas supply system[[3]], which routes a biomass-source fuel gas generated by a gasification furnace[[1]], to a utilization system[[2]]. Fuel gas from the gas reforming tower is routed through a fuel gas induction system [[5]]to the gasification furnace for use as fuel therein during the time required for the gas reforming tower to attain the process temperature.